§193.05-10 Fixed fire extinguishing systems.

- (a) Approved fire extinguishing systems shall be installed in those locations delineated in this section.
- (b) A fixed carbon dioxide or other approved system shall be installed in all lamp and paint lockers, oil rooms, and similar spaces.
- (c) Fire extinguishing systems shall be provided for internal combustion engine installations in accordance with the following:
- (1) Enclosed spaces containing gasoline engines shall have fixed carbon dioxide systems.
- (2) If a fire extinguishing system is installed to protect an internal combustion or gas turbine installation, the system shall be of the carbon dioxide type.
- (3) On vessels of 1,000 gross tons and over, a fixed carbon dioxide system shall be installed in all spaces containing internal combustion or gas turbine main propulsion machinery, auxiliaries with an aggregate power of 1,000 b. hp. or greater, or their fuel oil units, including purifiers, valves, and manifolds.
- (d) A fixed carbon dioxide system shall be installed in all chemical storerooms.
- (e) On vessels of 1,000 gross tons and over, a fixed carbon dioxide, or foam system shall be installed in all spaces containing oil fired boilers, either main or auxiliary, or their fuel oil units, valves, or manifolds in the line between the settling tanks and the boilers. The arrangement and details of the foam system shall be as set forth in part 95 of Subchapter I (Cargo and Miscellaneous Vessels) of this chapter.
- (f) Where an enclosed ventilating system is installed for electric propulsion motors or generators, a fixed carbon dioxide extinguishing system shall be installed in such system.
- (g) The arrangements and details of the fixed carbon dioxide extinguishing systems shall be as set forth in subpart 193.15.
- (h) Additional specific requirements for fire extinguishing systems for spaces containing explosives and other dangerous articles or substances are in part 194 of this subchapter.

§193.05-15 Hand portable fire extinguishers and semiportable fire ex-tinguishing systems.

(a) Approved hand portable fire extinguishers and semiportable fire extinguishing systems shall be installed on all manned vessels as set forth in subpart 193.50.

Subpart 193.10—Fire Main System, **Details**

§193.10-1 Application.

- (a) The provisions of this subpart, with the exception of §193.10-90, shall apply to all vessels contracted for on or after March 1, 1968.
- (b) Vessels contracted for prior to March 1, 1968, shall meet the requirements of §193.10-90.

§193.10-5 Fire pumps.

(a) Vessels shall be equipped with independently driven fire pumps in accordance with Table 193.10-5(a).

TABLE 193.10-5(A)

Gross	tons	Mini- mum	Hose and hy-	Nozzle	Length
Over	Not over	number of pumps	drant size, inches	orifice size, inches	of hose, feet
	100	11	111/2	1 1/2	50
100	1,000	1	11/2	5/8	50
1,000	1,500	2	11/2	5/8	50
1,500		2	221/2	27/8	² 50

1 On vessels of 65 feet in length or less, 3/4-inch hose of good commercial grade together with a commercial garden hose nozzle may be used. The pump may be hand operated and the length of hose shall be sufficient to assure coverage of all parts of the vessel.

275 feet of 1½-inch hose and 5½-inch nozzle may be used where specified by § 193.10–10(b) for interior locations and 50 feet 1½-inch hose may be used in exterior locations on vessels in other than ocean or coastwise services.

sels in other than ocean or coastwise services

- (b) On vessels of 1,000 gross tons and over on an international voyage, each required fire pump, while delivering water through the fire main system at a pressure corresponding to that required by paragraph (c) of this section, shall have a minimum capacity of at least two-thirds of that required for an independent bilge pump. However, in no case shall the capacity of each fire pump be less than that otherwise required by this section.
- (c) Each pump must be capable of delivering water simultaneously from the outlets having the greatest pressure drop from the five pumps to the nozzles